

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions of claims in the application.

Listing of Claims

1. (currently amended) Human β TrCP protein (h- β TrCP) for the targeting of proteins towards proteasome degradation pathways, said protein having SEQ ID NO:2 and being capable of interacting with proteins degradable by proteasome, which possess the phosphorylation unit comprising the amino acids Asp-Ser-Glu-Xaa-Xaa-Ser (SEQ ID NO:9), in which Xaa is any natural amino acid and the serine residues are phosphorylated and said protein comprising the following units having the following positions in the sequence SEQ ID NO:2:

-F-box:	amino acids 147 - 191,
-first WD unit:	amino acids 259 - 292,
-second WD unit:	amino acids 304 - 332,
-third WD unit:	amino acids 343 - 373,
-fourth WD unit:	amino acids 387 - 415,
-fifth WD unit:	amino acids 427 - 455,
-sixth WD unit:	amino acids 467 - 492, and
-seventh WD unit:	amino acids 516 - 544.

2. (canceled)

3. (previously presented) Protein according to Claim 1, characterized in that it is capable of interacting with the Vpu protein of HIV-1 virus or with the cell proteins $I\kappa\beta$ or β -Catenin.

4. (previously presented) Protein according to claim 1, characterized in that it is capable of interacting with the Skp1p protein.

5 - 6. (canceled)

7. (currently amended) A nucleic acid sequence coding for the human protein h- β TrCP according to Claim 1, characterized in that it consists of:

a) the DNA sequence SEQ ID No. 4 NO:1;

~~b) a DNA sequence which hybridizes under strict conditions with the above sequence;~~

e) b) A DNA sequence which, due to the degeneracy of the genetic code, results from the sequences a) ~~and b)~~ above and codes for the human protein h- β TrCP having SEQ ID NO:2; or

d) c) a mRNA and cDNA sequence corresponding to a), ~~b)~~, or e) b).

8 - 30. (canceled)

31. (original) Expression vector, characterized in that it comprises a nucleic acid sequence according to claim 7 and the means necessary for its expression.

32. (original) Microorganisms or host cells transformed by an expression vector according to claim 31.

33 - 36. (canceled)

37. (previously presented) A method of identifying anti-HIV-1 antiviral agents, the method comprising the step of screening anti-HIV antiviral agent candidates using the h- β TrCP protein of Claim 1 to determine the capability of the anti-HIV antiviral agent candidates to inhibit the interaction between h- β TrCP protein and Vpu protein, wherein an anti-HIV antiviral agent candidate that inhibits binding between h- β TrCP protein and Vpu protein is identified as an anti-HIV-1 antiviral agent.

38 - 50. (canceled)